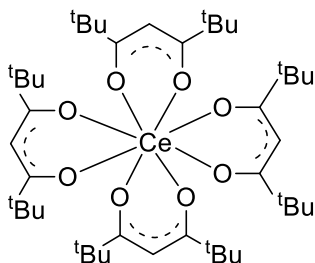


Catalog # 58-5000 Tetrakis(2,2,6,6-tetramethyl-3,5-heptanedionato)cerium(IV), min. 97% (99.9%-Ce) (REO) [Ce(TMHD)4].



Thermal Behavior:

- Melting point 275-280°C [1]
- Sublimation at 246-254°C/1 atm [2]
- Sublimation at 140-145°C/0.05 Torr [5]
- Sublimation at 180°C/0.1 Torr [3]
- Decomposition 270-295°C [4]
- TGA data available in [2, 4, 9]

Technical Notes:

1. MOCVD, ALD precursor for preparation of barium thin films.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
CeS	MOCVD	200°C	Atm	H <sub>2</sub> /H <sub>2</sub> S	570°C	6
(CeO <sub>2</sub> ) <sub>0.8</sub> (YO <sub>1.5</sub> ) <sub>0.2</sub>	MOCVD	0.01 mol/l in Tol, inject.	650 Torr	Y(tmhd) <sub>3</sub> ; O <sub>2</sub> /Ar	500-700°C	7
CeO <sub>2</sub>	PECVD	170°C	11 Torr	Ar or O <sub>2</sub> /Ar	150-300°	8
Sm <sub>2</sub> O <sub>3</sub> :CeO <sub>2</sub> Ce <sub>0.8</sub> Sm <sub>0.2</sub> O <sub>1.9</sub>	MOCVD	0.001 mol/l in Tol, inject.	-	Sm(DPM) <sub>3</sub> ; O <sub>2</sub> /N <sub>2</sub>	400-650°C	9
CeO <sub>2</sub>	ALD	160°C	-	O <sub>3</sub>	275°C	10

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